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| 09/735,919      | 04/09/2001  | Marc Herrmann        | T3264-906756        | 5817             |

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| EXAMINER |
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BENGZON, GREG C

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| ART UNIT | PAPER NUMBER |
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2144

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 04/03/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/735,919

Applicant(s)

HERRMANN ET AL.

Examiner

Greg Bengzon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been examined. Claims 26-35 are pending. Claims 1-25 are cancelled.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/17/2007 has been entered.

#### ***Priority***

The effective date of the claims described in this application is December 16, 1999.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 26-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Hermann et al. (US Patent 7054932 B2).

Claims 26-35 (Claim set A) rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 21-33 (Claim set B) .

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims present very similar limitations including but not limited to (herein presented for example a comparison of Claim 26A and Claim 21B [*in italics*]):

Computer device comprising a plurality of indicator agents (*a plurality of computer units constituting hardware resources...said resources including memories having stored therein indicator agents*)

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Configuration means specifying the domain in which each indicator agent should be deployed (*'means for organizing the monitored domain into monitored subdomains'*)

configuration means comprising a configuration deployment agent ( *configuring ...information synthesis nodes ... to define corresponding indicators*)

writing means for writing an identification of at least one other indicator agent (*means for modifying the associations between the synthesis agents and the indicator agents*)

### ***Claim Interpretation***

Before any construction of the claims occur, it is essential that the terms in the claim(s) be clearly defined. Here are the definitions which the Examiner has determined to be most reasonable for important terms in the claims. In light of the; overly broad and nebulous disclosure, these definitions will be relied on to properly understand what is being claimed.

1. Agent: an autonomous process performing a service (as used in the art)
2. Indicators: scalar (numerical) representations of states of computing components (per present specification, Page 1, Lines 17-23)
3. Indicator agents: process which determines particular indicators (per present specification, Page 1, Lines 17-23)

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4. Domain: logical grouping of network computing nodes (per present specification, Page 4, Lines 11-12)
5. Configuration agent: process which creates indicator agents (per present specification, Page 10, Lines 15-26)
6. Subscriber List: a data table storing the names of other indicator agents.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 28-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Dependent claims 28,29 recite "*analyzing a formula associated with the indicator*". Since no formula has been expressly defined, it is impossible to determine proper metes and bound of this limitation.

It is suggested that positive, functional behavior be recited in the claims so the metes and bounds of the claims can be easily ascertained, and a definition of what it is the inventor seeks to patent is reasonably and clearly stated.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. §102(f) or (g) prior art under 35 U.S.C. §103(a).

Claims 26,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turek et al. (U.S. Patent Number 6,460,070); hereinafter referred to as Turek, in view of Jung et al. (U.S. Patent Number 6,308,208).

Using the above definitions for claim terms, Examiner has concluded that the independent claims (i.e. Claim 26) require determination of a set of variables (i.e., indicators) to dictate what is intended to be measured (i.e., indicated) at specified nodes, on a list, defining a given domain. Among these nodes on the list, processes are

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spawned/created/configured/etc., to determine the specified indicators on each node.

The dependent claims range from arbitrary function call names to agent process generalizations.

Turek disclosed construction of software agents by selection or assembling one or more tasks. See, inter alia, Column 2, Lines 37-41, and Column 7, Lines 49-57. This agent is deployed to measure one or more "indicators" at the specified node(s). See, inter alia, Column 2, Lines 47-49. The disclosed gateways act to manage their own "domain" of nodes. See, inter alia, Column 4, Lines 50-58. The system is equipped to recognize and rectify myriad differing network conditions.

Jung provided very similar teachings, related again with network conditions and deployed agents. See, inter alia, Columns 1-2. Jung expressly disclosed the scalar measurement of "indicators" as claimed. See, inter alia, Column 2, Line 26 through Column 3, Line 6. The system acted to propagate determined values of network measured resources to other agents in the system for coordinated system management. See, inter alia, Column 3, Lines 2-6. This provided a mechanism for monitoring and managing an entire realm of system "indicators". See, inter alia, Column 4, Lines 34-38. The system used atomic indicator agents which were capable of referencing each other, while having attributes indicating state (i.e., indicating agents, and indicators, as claimed). See, inter alia, Column 6, Line 63 through Column 7, Line



Also, the "cells" were completely customizable, equipped to perform any one or various sets of functions. See, inter alia, Column 7, Lines 10-19. Thus, the system operated to propagate changes and observed states to other autonomous agents for purely distributed management. Lastly, the use of multiple agents (i.e., the use of concurrently operating/executing cells and maintenance of cell states) was likewise evident. See, inter alia, Column 7, Lines 32-61. 33. The combination of these teachings was not challenged by Applicant. This makes sense, since the inventions are subcombination usable together on the same system. Note Figures 1, both Patents. The resulting systems provided a system operating to configure and deploy operating agents to specified domains which resulted in logical arrangements of monitored "indicators".

Turek disclosed (re. Claim 26) a plurality of indicator agents that evaluate indicators, each indicator characterizing the status or the operation of one or more resources of the computer system. (Turek- Column 2, Lines 37-41, and Column 7, Lines 49-57)

Turek disclosed (re. Claim 26) configuration means (Turek-Column 4 Lines 40-55) that specifies the domain or domains of the computer system [Turek- (Turek- Column 4 Lines 40-55, '*managed region*') in which each indicator agent should be deployed, the configuration means comprising a configuration deployment agent (Turek- Column 7 Lines 50-60, '*dispatch mechanism*') that creates, for each resource to be

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monitored, a configuration agent, wherein each configuration agent creates the plurality of indicator agents for the resource and each indicator agent evaluates one of the plurality of indicators, each indicator agent managing a subscriber list.

While Turek substantially disclosed the claimed invention, Turek did not disclose (re. Claim 26) writing an identification of at least one other indicator agent.

Jung disclosed (re. Claims 26) writing an identification of at least one other indicator agent (Jung-Column 8 Lines 5-15, *'control mechanism implementing cell identification techniques and cell state propagation'*).

At the time of the invention it would have been obvious to combine Jung into Turek. The motivation for said combination would have been (Jung-Column 1 Lines 65) to provide a resource model-based management scheme that operates across distributed nodes.

Turek-Jung disclosed (re. Claim 27) wherein each configuration agent comprises means which creates an indicator agent (Turek-Column 7 Lines 50-55) for each indicator of the resource to which said indicator is assigned, said indicator agent being an indicator deployment agent which determines, for the indicator with which said deployment agent is associated, various combinations of the values of the variables for

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which the indicator is calculated. (Turek-Column 7 Lines 10-15, *'events of which they are interested in receiving notice'*)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turek et al. (U.S. Patent Number 6,460,070), hereinafter referred to as Turek, in view of Jung et al. (U.S. Patent Number 6,308,208), further in view of Anerousis (US Patent 6393472).

While Turek-Jung substantially disclosed the invention, Turek-Jung did not disclosed (re. Claim 28) an indicator compiler that generates for each indicator, after analyzing a formula associated with the indicator, two object classes "I\_Deployer" and "I\_Indicator", which respectively correspond to the indicator deployment agents that deploy the instances of the class "I\_Indicator" and to the indicator agents that evaluate the indicator.

Anerousis disclosed (re. Claim 28) an indicator compiler that generates for each indicator, after analyzing a formula associated with the indicator, (Anerousis-Column 8 Lines 10-15) two object classes, which respectively correspond to the indicator deployment agents that deploy the agents (Anerousis-Column 10 Lines 60-65, 'every AMO must be instantiated within a MAVS') and to the indicator agents that evaluate the indicator. (Applicant-Figure 1, Column 7 Lines 45-55, 'Aggregated Managed Objects')

The Examiner notes that Anerousis disclosed a special management agent called MAVS which is equivalent to the claimed invention's 'I\_Deployer' object class. Similarly Anerousis disclosed AMOs which are equivalent to the claimed inventions' 'I\_Indicator' object class.

Furthermore Anerousis disclosed analyzing a selection formula [filter function] in order to determine which indicator agents [*managed objects*] are used to evaluate each indicator.

At the time of the invention it would have been obvious to combine Anerousis into Turek-Jung. The motivation for said combination would have been (Anerousis-Column 2 Lines 35-40) to aggregate the control of a large number of network elements into simpler interfaces.

Turek-Jung-Anerousis disclosed (re. Claim 29,30) means which resolves the names of objects referenced in a formula defining associated with the indicator (Anerousis-Column 8 Lines 25-30, *'resolved into a list of element management agents'*)

Turek-Jung-Anerousis disclosed (re. Claim 31) searching for all objects identified in the formula of the indicator, (Anerousis-Column 8 Lines 25-35) and

means which creates the indicator agent associated with the indicator deployment agent if the constraint is satisfied, using as parameters the objects corresponding to the valid combinations of the values of the variables found.

Turek-Jung-Anerousis disclosed (re. Claim 32,33) wherein the configuration deployment agents and the configuration agents are managed by at least one agent machine installed in at least one resource of the monitored domain. (Anerousis-Column 7 Lines 50-65)

Turek-Jung-Anerousis disclosed (re. Claim 34,35) means which manages each indicator deployment agent either by the agent machine that manages the configuration

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agent associated with the indicator deployment agent, or by a different agent machine.

(Anerousis-Column 7 Lines 50-65)

### ***Response to Arguments***

Applicant's arguments filed 01/17/2007 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant presents the following argument(s) [*in italics*]:

*Since the Office Action omits a motivation statement, and the references, themselves, fail to explicitly identify a suggestion or motivation to modify their teachings with the teachings of the other of the references ... the Office Action does not establish a prima facie case of obviousness.*

The Examiner herewith presents motivation to combine the prior art by Turek and Jung.

The Applicant presents the following argument(s) [*in italics*]:

*The outstanding Office Action is also completely silent with respect to the claimed subscriber list.*

The Examiner notes that the subscriber list is a data table storing the names of other indicator agents. Jung disclosed a monitoring node for storing attributes and event corresponding to an observed node, where the observed attributes and events are stored a local database (Jung-Column 1 Lines 15-20), said local database thus being equivalent to a subscriber list.

The Applicant presents the following argument(s) *[in italics]*:

*[The combination of Turek and Jung] fail to disclose writing means associated with each of the indicator agents, where each writing means is arranged to write an identification of at least one other indicator agent in the subscriber list.*

The Examiner respectfully disagrees with the Applicant. Where Jung disclosed cell identification and state change propagation where said cell information is maintained on a database, Jung disclosed '*where each writing means is arranged to write an identification of at least one other indicator agent in the subscriber list.*'

The Examiner notes that it would have been inherent for the control mechanism by Jung to have writing means associated with each node, in order to update the node local database.

### **Conclusion**

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant.

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Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Bengzon whose telephone number is (571) 272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

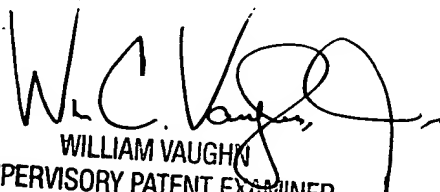


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